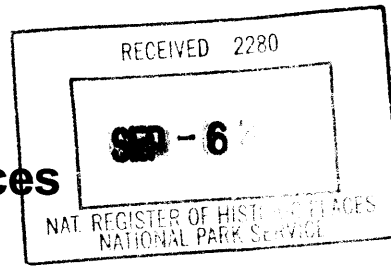


United States Department of the Interior
National Park Service



National Register of Historic Places Registration Form

This form is for use in nominating or requesting determination for individual properties and districts. See instruction in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Dotsero Bridge

other names/site number CDOT No. F-08-F; 5EA1604

2. Location

street & number Interstate Highway 70 Service Road at milepost 133.51 [N/A] not for publication

city or town Dotsero [N/A] vicinity

state Colorado code CO county Eagle code 037 zip code _____

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] nomination [] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [] statewide [X] locally. ([] See continuation sheet for additional comments.)

Georgina Cortez
Signature of certifying official/Title

State Historic Preservation Officer August 21, 2002
Date

State Historic Preservation Office, Colorado Historical Society
State or Federal agency and bureau

In my opinion, the property [] meets [] does not meet the National Register criteria. ([] See continuation sheet for additional comments.)

Signature of certifying official/Title _____ Date _____

State or Federal agency and bureau _____

4. National Park Service Certification

I hereby certify that the property is:

- entered in the National Register [] See continuation sheet.
- determined eligible for the National Register [] See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register
- other, explain [] See continuation sheet.

Edson H. Beall
Signature of the Keeper 10/15/02
Date of Action

Dotsero Bridge
Name of Property

Eagle County, Colorado
County/State

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not count previously listed resources.)

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing.
(Enter "N/A" if property is not part of a multiple property listing.)

Highway Bridges in Colorado

Number of contributing resources previously listed in the National Register.

0

6. Function or Use

Historic Function
(Enter categories from instructions)

Road-related

Current Functions
(Enter categories from instructions)

Road-related

7. Description

Architectural Classification
(Enter categories from instructions)

Other: Steel, rigid-connected Parker through
truss

Materials
(Enter categories from instructions)

foundation _____
walls _____

roof _____
other Steel _____
Concrete _____
Asphalt _____

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

Dotsero Bridge
Name of Property

Eagle County, Colorado
County/State

8. Statement of Significance

Applicable National Register Criteria

(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "X" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey
- # _____
- recorded by Historic American Engineering Record
- # _____

Areas of Significance

(Enter categories from instructions)

Transportation

Engineering

Periods of Significance

1935-1952

Significant Dates

N/A

Significant Person(s)

(Complete if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Colorado Department of Highways

Midwest Steel & Iron Works

Horner, A.S. & Switzer, C.A.

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other

Name of repository:

Colorado Historical Society

Colorado Dept. of Transportation

Dotsero Bridge
Name of Property

Eagle County, Colorado
County/State

10. Geographical Data

Acreage of Property less than one

UTM References

(Place additional UTM references on a continuation sheet.)

1. 13 323980 4390640
Zone Easting Northing

2. _____
Zone Easting Northing

3. _____
Zone Easting Northing

4. _____
Zone Easting Northing

[] See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Office of Archaeology and Historic Preservation and Clay Fraser, principal

organization Colorado Historical Society and Fraser Design date May 21, 2002

street & number 1300 Broadway telephone 303-866-4681

city or town Denver state CO zip code 80203

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Colorado Department of Transportation

street & number 4201 E. Arkansas Avenue telephone _____

city or town Denver state CO zip code 80222

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.)

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number 7 Page 1

DESCRIPTION

Location: Interstate Highway 70 Service Road at milepost 133.51 north of the Dotsero interchange

Setting: Over the Colorado River

Structure length: 276 feet
Structure width: 33.50 feet
Roadway width: 30 feet

Main span number: 1
Approach span number: 2
Main span length: 150 feet

Superstructure: Steel, rigid-connected Parker through truss
Substructure: Concrete abutments, wingwalls and piers with angled cutwaters
Floor/decking: Concrete deck with asphalt overlay
Other features: Upper chord – 2 channels with cover plate and lacing
Lower chord – 2 channels with batten plates
Vertical and diagonal – wide flange
Floor beams and stringers – steel I-beam
Steel lattice guardrails with slotted concrete guardrails at approaches
Colorado Highway Department bridgeplates

Erected: 1935
Designer: Colorado Department of Highways
Fabricator: Midwest Steel & Iron Works
Contractor: A.S. Horner & C.A. Switzer

Alterations: None

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number 8 Page 2

SIGNIFICANCE

The 1935 Dotsero Bridge on the Interstate Highway 70 Service Road, over the Colorado River north of the Dotsero interchange, meets the registration requirements under Criterion A in the area of Transportation and under Criterion C in the area of Engineering as set forth in the *Highway Bridges in Colorado*, Multiple Property Documentation Form. The period of significance begins in 1935 with the completion of the bridge and extends through its historic use to 1952, a date fifty-years-of-age in keeping with National Register criteria.

Over its lengthy existence, the Eagle River Road has functioned in a variety of capacities: as a private toll road, county road, Denver-Grand Junction Road, State Primary Road No. 10, State Highway 4, U.S. Highway 40 South, and U.S. Highway 6. As one of the two primary routes through Colorado's central Rocky Mountains, it served as a pivotal link between Colorado's Front Range and the Western Slope.

The state legislature recognized the value of this link in 1899 when it designated the route the Denver-Grand Junction Road. Later the Midland Trail Association reinforced its importance by including it as part of a transcontinental route. When the Colorado Highway Department (CHD) upgraded the highway in the 1930s, it further bolstered the road's importance. As a pivotal part of this latter endeavor, the Dotsero Bridge is significant for its contribution to Colorado transportation.

CHD awarded the construction contract for this bridge and adjacent highway to Denver contractors A.S. Horner and C.A. Switzer. Using a steel superstructure fabricated in Denver by the Midwest Steel & Iron Works, the contractors erected the bridge in 1935 for a cost of \$46,107. Highway 6/40S carried increasingly heavy traffic between Denver and Grand Junction for 25 years before CHD began planning for its replacement. In 1959, CHD engaged the E. Lionel Pavlo Engineering Company of New York to reconnoiter the best route for an interstate freeway west from Denver through the mountains. Pavlo's report, issued in April 1960, covered the 100-mile route between Dotsero and Empire Junction, focusing on a shorter route between Wolcott and Empire that would involve construction of a major tunnel beneath the continental divide. Construction on I-70 through the mountains followed in the 1960s and 1970s, culminating with the completion of the Vail Pass segment and the second bore of the Eisenhower Tunnel in 1979. Now on a frontage road for I-70, the Dotsero Bridge continues to carry vehicular traffic in essentially unaltered condition.

Engineering

The Dotsero Bridge is technologically noteworthy as an intact example of CHD standard truss design. The highway department erected numerous Parker trusses from 1922 to 1945 at highway river crossings throughout the state, ranging in span length from 125 feet to 200 feet.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number 9 Page 3

Attrition of these long span bridges has been severe, and only eight Parker through trusses remain in place on Colorado's highways. In essentially unaltered condition, the Dotsero Bridge remains as one of the few surviving examples of what was once a mainstay structural type.

In the early 1930s, when CHD began planning a major reconstruction of the highway through Eagle County the project involved construction of a variety of flumes, guard fences, wire fences, box and pipe culverts and a steel truss over the Colorado River to replace the 1900 Dotsero Bridge. For the new bridge, CHD delineated a rigid-connected Parker through truss that extended 150 feet between the bearing pins and carried a 30-foot-wide roadway and was flanked on each end by a steel stringer span. The truss was subdivided into eight 18 foot 9 inch panels, the tallest of which stood 25 feet 10 inches from chord to chord. The upper chords and inclined endposts consisted of two back-to-back 12 inch steel channels, covered by a continuous 3/8 inch steel plate on top joined by bar lacing underneath. The verticals were 10 inch wide flanges, as were the diagonals in the outermost panels.

The interior panel diagonals consisted of two 3x4 inch angles with batten plates. These were braced laterally by a laced two angle member that extended horizontally across the central four panels. The lower chords were made up of two back-to-back 12 inch channels with batten plates. All of these web members were field riveted using 3/8 inch steel gusset plates. The truss was simply supported on its four corners by heavy cast steel bearing shoes, fixed on one end and rocking on the other, which were anchor bolted to reinforced concrete piers.

To brace the two webs laterally, overhead struts extended 16 feet above the roadway at the panel points. The interior struts consisted of two back-to-back pairs of 3x5-inch angles, joined by bar lacing and braced underneath by latticed panels. The portal struts were heavily gusseted, steel angle lattices, with the lower chords angled downward toward the endposts to form integral kneebraces. Wide flange floor beams, 27 inches deep, were riveted to the verticals at the panel points; these supported six lines of 16 inch wide flange stringers, on which the concrete slab deck rested. This deck was flanked on each side by an integrally poured concrete curb and steel lattice guardrail with steel plate hub rail on the truss and CHD standard slotted concrete guardrails at the approaches. Concrete bulkheads with recessed rectangular panels framed the guardrails at both ends. The truss carried standard CHD bronze bridge plates on its bulkheads and cast iron plates on its endposts.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number 9 Page 4

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**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number 9 Page 5

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**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number 10 Page 6

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The bridge is located on the Interstate Highway 70 Service Road at milepost 133.51. The boundaries of this nomination consist of a rectangle of land 10 feet out in each direction from the footprint of the bridge.

BOUNDARY JUSTIFICATION

The nomination includes all the land directly and historically associated with the bridge.

PHOTOGRAPH LOG

The following information pertains to photograph numbers 1-4:

Name of Property: Dotsero Bridge
Location: Eagle County, Colorado
Photographer: Clayton Fraser
Date of Photographs: September 1998
Negatives: Colorado Department of Transportation

Photo No. _____ **Photographic Information** _____

- 1 Overview to north with approach spans
- 2 View to northwest through bridge
- 3 View to west of underside
- 4 View to southwest of roadway

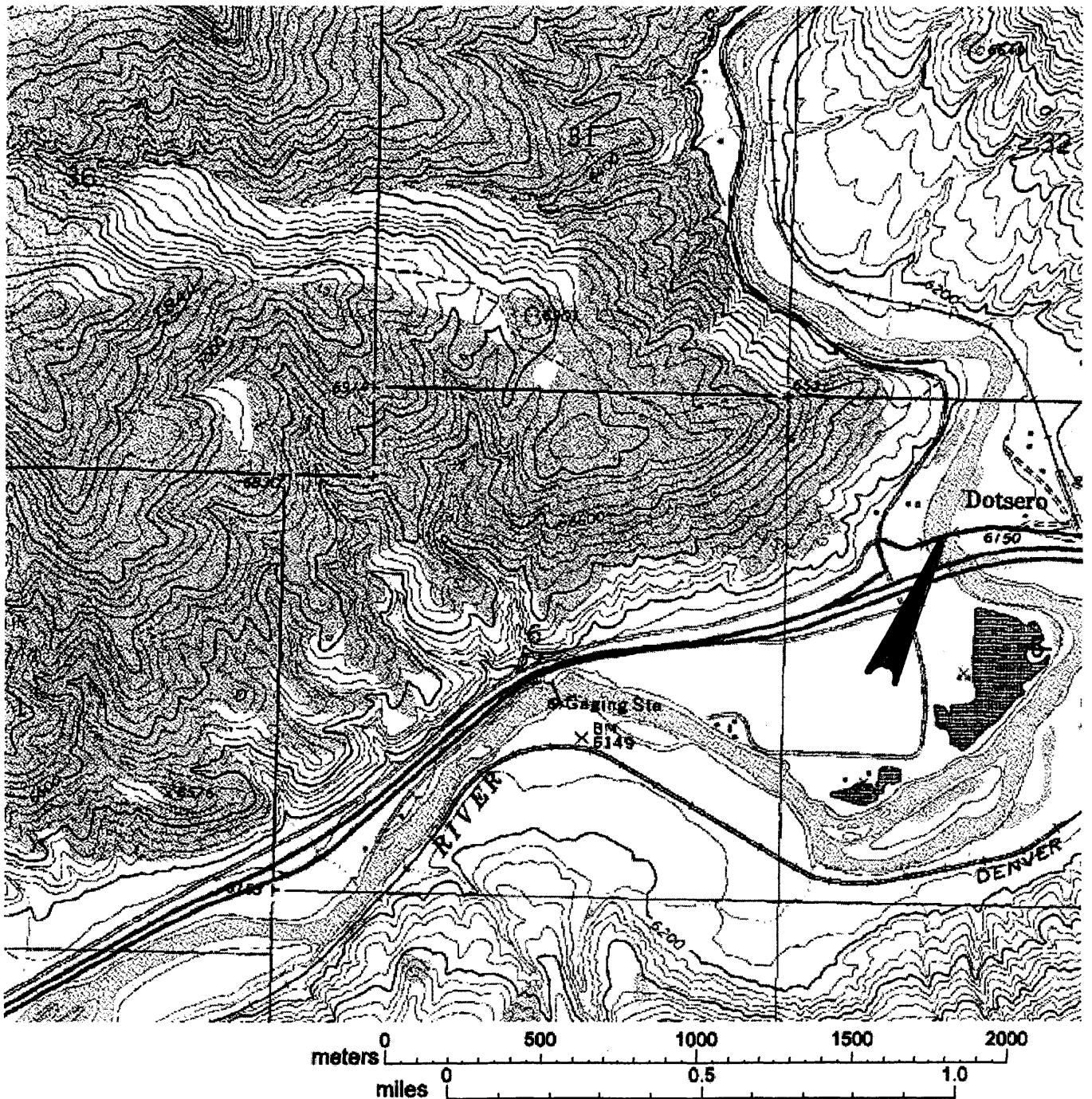
United States Department of the Interior
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National Register of Historic Places
Continuation Sheet

Dotsero Bridge
Eagle County, Colorado
Highway Bridges in Colorado, MPS

Section number ___ Page 7

USGS TOPOGRAPHIC MAP
Dotsero Quadrangle, Colorado
7.5 Minute Series



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: ADDITIONAL DOCUMENTATION

PROPERTY Dotsero Bridge
NAME:

MULTIPLE Highway Bridges in Colorado MPS
NAME:

STATE & COUNTY: COLORADO, Eagle

DATE RECEIVED: 5/07/03 DATE OF PENDING LIST:
DATE OF 16TH DAY: DATE OF 45TH DAY: 6/21/03
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 02001155

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT RETURN REJECT _____ DATE

ABSTRACT/SUMMARY COMMENTS:

Additional Documentation Accepted

RECOM. / CRITERIA

REVIEWER

Edray Beall

DISCIPLINE

Historicism

TELEPHONE

DATE

6/20/03

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

02001155

Dotsero Bridge
Eagle County/ Colorado
Highway Bridges in Colorado MPS

Section number 10 Page 1

This additional documentation corrects an erroneous UTM reference contained in the original nomination. The boundary justification remains unchanged.

UTM References

1.	13	322980	4390660
	Zone	Easting	Northing

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Georgina Cortez Deputy State Historic Preservation Officer April 29, 2003
 Signature of certifying official/Title Date

Office of Archaeology and Historic Preservation, Colorado Historical Society
 State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria.
 (See continuation sheet for additional comments.)

 Signature of certifying official/Title Date

 State or Federal agency and bureau